Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

1.967
A2C82
no.3

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH ADMINISTRATION
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
WASHINGTON 25, D. C.

In Cooperation with State, Federal and other Agencies

COTTON INSECT CONDITIONS FOR WEEK ENDING AUGUST 9, 1947

(Eleventh Cotton Insect Survey Report for 1947)

The boll weevil situation has been improving for several weeks, except in a few scattered areas where rains have occurred frequently and mild temperatures have prevailed. In most of the areas where the boll weevil occurs, hot dry weather has been effective in killing untold millions of weevils in all stages of development. In several states the entomologists report that the cotton growers have this year taken unusual interest in controlling the boll weevil by the use of insecticides. The more general and careful use of insecticides has had an important part in holding down the boll weevil populations in many areas. Parasitic and predaceous enemies of the boll weevil are always at work. Usually they go unnoticed, but they are effective in holding down the weevil infestations.

Cotton leafworms were reported in Walton County, Florida, near the Alabama state line August 8. This is the only infestation reported this season except in 5 counties in Texas.

INSECTICIDES

No shortage of insecticides was reported. The fall armyworm or southern grassworm is causing damage to many crops in Louisiana, Mississippi, Alabama, Georgia, and South Carolina and may require control by insecticides on cotton as well as on other crops.

BOLL WEEVIL

NORTH CAROLINA: Weevils were found in all of the 143 fields examined in 22 counties. In 85 fields more than 50% of the squares were punctured. James T. Conner, Jr., Extension Entomologist, reported on August 9: "Most of the fields still have lots of squares. Some of the northern fields are beginning to bloom in the top but other fields are just beginning to fruit well. Cotton should be poisoned until it stops fruiting."

SOUTH CAROLINA: Weevils were found in all of the 70 fields examined in 16 counties with an average of 90% punctured squares. The cotton in the Piedmont area is continuing to fruit, but in most fields it has passed the peak of fruiting. The hot, dry weather of the past three weeks has been beneficial to most cotton in the Piedmont area, even though excessive shedding has occurred in many fields. Weevils are numerous and there will be a very heavy population to enter hibernation this fall. Fields which are still being dusted are blooming and the infestation is being held down below that in undusted fields where many of the young bolls are being attacked by weevils.

C. R. Jordan, Jr., Assistant Extension Entomologist, reported on August 11: "This week's boll weevil report covers 85 fields in 17 counties, finding all fields infested, with an average of 43% punctured squares. This is a 7% increase over last week's average of 36%. The weevils have been migrating from the lower counties for several weeks and farmers in the Piedmont may expect to find the number of weevils in their fields greatly increased. Farmers cannot be urged too strongly to continue dusting until bolls are hard enough to prevent damage by the weevil."

GEORGIA: Boll weevils were found in all of the 30 fields examined in 14 counties in northern Georgia, but apparently the weevil situation is less serious than it was last week. The highest infestation reported was a field in McDuffie County where 41% of the squares were punctured. This was the only field examined where more than 30% of the squares were punctured. In 11 fields in Barrow, Clarke, Jackson, Newton, Oconee, Pike, Spalding, and Walton Counties less than 10% of the squares were punctured. Many of these fields had been dusted for boll weevil control. P. M. Gilmer, Tifton, reports that in the Piedmont section of Georgia the heavy poisoning program and hot weather have reduced the boll weevil populations considerably.

ALABAMA: W. A. Ruffin, Extension Entomologist, Auburn, wired on August 11: "Examined 60 fields in north central and southeast Alabama last week. Infestation in undusted fields averaged 42% and dusted fields averaged 23%. Three weeks very hot, dry weather has stopped cotton from fruiting but has not stopped boll weevil damage. Much needed rain fell over area past week-end."

MISSISSIPPI: R. P. Colmer, Chief Inspector of the State Plant Board, reported on August 11 that no weevils were found in 77 of the 272 fields examined in 33 counties, and in the 213 weevil-infested fields there was an average of 23% punctured squares as compared to 19% last week and 48% on this date last year. The average in all of the 272 farms examined was 17% punctured squares as compared to 14% last week. Reports of fields with more than 40% punctured squares were received from Chickasaw, Coahoma, Holmes, Humphreys, Issaquena, Lauderdale, Lee, Montgomery, Oktibbeha, Sharkey, Warren, Washington, and Yazoo Counties. There are many fields in which the boll weevil situation is not serious, as some fields were found to be free of weevils in Alcorn, Bolivar, Coahoma, Holmes, Humphreys, Leflore, Pontotoc, Quitman, Sharkey, Sunflower, Tallahatchie, Washington, and Yazoo Counties.

E. W. Dunnam and S. L. Calhoun report that weevils were found in 86 of the 150 fields examined in 13 Delta counties. Weevils were found in all of the 22 fields they examined in Holmes, Issaquena, and Warren Counties. The weather has been favorable for cotton production in the Delta and cotton is now blooming profusely.

B. J. Young of the Delta and Pine Land Company, Scott, reported on August 7 that weevils were found in all of the 355 fields examined in Bolivar County, but in only 26 fields were more than 25% of the squares punctured, and the highest infestation was 53% punctured squares. He stated, "Weevils are general over the entire crop, but so far only spot dusting is being carried on. Very few lice are being found where 3 applications of calcium arsenate have been used. The extremely hot weather has been most beneficial in the control of the weevil. I am afraid many planters are becoming too optimistic over weevil control. It is the late applications that count most in making cotton."

F. F. Bibby found the infestations in 11 fields in Itawamba County in the northeastern part of the State ranged from 5 to 27% punctured squares, except in one field where 75% of the squares were punctured. None of these fields had been poisoned.

LOUISIANA: The average boll weevil infestation in 156 fields in 8 parishes in northern Louisiana was 15%. No punctured squares were found in 3% of the fields; in 48% of the fields the infestation was less than 10%; in 32% it was from 10 to 25%; in 13% from 25 to 50%; and in only 4% of the fields were more than 50% of the squares punctured. Weather continued unfavorable for weevil development.

ARKANSAS: Weather conditions continued unfavorable for weevil development. The average weevil infestation in 100 fields in 9 counties was 22% punctured squares. In 8% of the fields no weevils were found; in 33% of the fields less than 10% of the squares were punctured; in 25% of the fields the infestation ranged from 10 to 25%; in 18% of the fields from 25 to 50%; and in 16% of the fields more than 50% of the squares were punctured.

TEXAS: Continued hot, dry weather over the State aided in the control of cotton insects, especially the boll weevil. Infestations continue low except in a few isolated areas. The average weevil infestation in 514 fields in 25 counties was 14% punctured squares as compared to 12% the previous week. The slight increase in infestation was caused by a scarcity of squares. All early planted fields are maturing rapidly and heavy shed is occurring from South Texas to the Oklahoma line, except in western and northwestern areas.

OKLAHOMA: C. F. Stiles, Extension Entomologist, reported on August 9: "The weather was very hot and dry in cotton-producing counties during the past week. Only a few light local showers fell. Cotton and other crops are suffering from lack of moisture. The boll weevil infestation increased over the State in many undusted fields. Boll weevils increased during the past two weeks in Pottawatomie, Seminole, Johnston, Lincoln, McCurtain, and Bryan Counties." The average square infestation in 135 fields in 18 counties was 31% as compared to 17% the previous week. No weevils were found in 3 fields in McClain, Hughes, and Stephens Counties. In 26 fields less than 10% of the squares were punctured; in 43 fields the infestations ranged from 10 to 25%; in 34 fields from 25 to 50%; and in 29 fields more than 50% of the squares were punctured.

COTTON LEAFWORM

TEXAS: Cotton leafworms were found in Jackson County on August 9, by Norman Kettler, of this Bureau. This is the fifth county in Texas from which the cotton leafworm has been reported this season.

FLORIDA: H. C. Young of this Bureau reported on August 8 that newly-hatched, half-grown, and full-grown larvae and pupae of the cotton leafworm were found in five fields of cotton in Walton County, Florida, near the Alabama-Florida state line. A number of empty pupal cases were observed, indicating that moths have emerged. The infestation is very light at the present time but generally distributed over the five fields observed.

BOLLWORM

SOUTH CAROLINA: The bollworm infestation is very light, but bollworm-punctured squares can be found in most fields. Bollworm moths are numerous and it is possible that some damage may occur to bolls.

TEXAS: Light, scattered infestations of bollworms were reported in various sections of the State, but they were numerous in only a few fields.

COTTON FLEAHOPPER, TARNISHED PLANT BUG, RAPID PLANT BUG AND OTHER MIRIDAE THAT ARE PESTS OF COTTON

MISSISSIPPI: E. W. Dunnam and S. L. Calhoun reported that in the examination of 150 fields in 13 Delta counties tarnished plant bugs were noted in 3 fields, rapid plant bugs in 12 fields, and Neurocolpus sp. in 7 fields. F. F. Bibby noted rapid plant bugs in most of the 11 fields examined in Itawamba County. K. P. Ewing reports that some dusting is being continued for cotton fleahopper control in a few scattered areas in northwestern Texas.

MISCELLANEOUS INSECTS

Fall Armyworm or Southern Grassworm (*Laphygma frugiperda*): This insect is reported as causing serious damage in Louisiana, Mississippi, Alabama, Georgia, and South Carolina, to corn, sorghum, grain crops, soybeans, alfalfa, pastures, and *cotton*.

Garden Webworm (*Loxostege similalis*): The garden webworm is reported as causing damage to cotton and various other crops in Mississippi and Texas.

Whiteflies collected from cotton by J. W. Monk in Pinal County, Arizona, were determined by L. M. Russell as *Trialeurodes abutilonea* (Haldeman). Whiteflies were also reported from 4 fields in the Delta section of Mississippi.

INSECTS ON IRRIGATED COTTON OF THE SOUTHWEST

ARIZONA: No increase in stink bug populations was noted in the Salt River Valley during the week. *Lygus* populations varied in different fields but as a whole were less than the previous week.

The injurious Hemiptera populations remained low in the Santa Cruz Valley, but an increase in aphid infestation was noted in some of the large-scale experimental fields that have been dusted by airplanes for hemipterous insect control. Some dusting was continued in the Sahuarita area for bollworm control.

There was little change in the injurious Hemiptera populations in Pinal County. Some dusting was continued. Cotton leaf perforator infestations have been brought under control in a number of fields that have been dusted with DDT mixtures.

L. S. Owen, County Agent, Graham County, reported injurious Hemiptera populations vary from field to field in the Safford Valley. Sweepings made in representative fields showed counts ranging from 7 to 21 per 100 net strokes. *Lygus* predominate but stink bugs are still present in many fields.

NEW MEXICO: Dusting was continued in Chaves and Eddy Counties for *Lygus* and cotton fleahopper control. Bollworm infestations are generally light but some fields have been dusted with DDT mixtures for their control. Cotton fields dusted in Dona Ana County show a satisfactory reduction in injurious Hemiptera populations.

TEXAS: Injurious Hemiptera populations on cotton increased in the El Paso Valley in fields that have not been poisoned. Weekly sweepings made in 10 study fields showed a decrease in injurious hemipterous insects due to poisoning in 4 of the fields. The average injurious insect populations in 70 fields in El Paso and Hudspeth Counties were 16 per 100 net strokes.

PREPARED AUGUST 15, 1947.

LIBRARY
CURRENT SERIAL RECORD
AUG 19 1947
U. S. DEPARTMENT OF AGRICULTURE